

AD-A254 158



2

The 1994 Louisiana Maneuvers: Is Back to  
The Future What Our Army Needs?

A Monograph  
by  
Major William R. Moyer  
Armor



DTIC  
ELECTE  
AUG 25 1992  
S B D

School of Advanced Military Studies  
United States Army Command and General Staff College  
Fort Leavenworth, Kansas

Second Term AY 91-92


Approved for Public Release; Distribution is Unlimited

92

8 21 149

92-23476



REPORT DOCUMENTATION PAGE			Form Approved OMB No. 0704-0188	
<small>Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.</small>				
1. AGENCY USE ONLY (Leave blank)	2. REPORT DATE 26 MAY 1992	3. REPORT TYPE AND DATES COVERED MONOGRAPH		
4. TITLE AND SUBTITLE THE 1994 LOUISIANA MANEUVERS: IS BACK TO THE FUTURE WHAT OUR ARMY NEEDS?		5. FUNDING NUMBERS		
6. AUTHOR(S) MAJOR WILLIAM R. MOYER, USA				
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) SCHOOL OF ADVANCED MILITARY STUDIES ATTN: ATZL-SWV FT LEAVENWORTH, KANSAS 66027-6900 COMM: (913) 684-3437 AV: 552-3237		8. PERFORMING ORGANIZATION REPORT NUMBER		
9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES)		10. SPONSORING / MONITORING AGENCY REPORT NUMBER		
11. SUPPLEMENTARY NOTES				
12a. DISTRIBUTION / AVAILABILITY STATEMENT APPROVED FOR PUBLIC RELEASE; DISTRIBUTION UNLIMITED		12b. DISTRIBUTION CODE		
13. ABSTRACT (Maximum 200 words) 				
14. SUBJECT TERMS ECHELONS ABOVE CORPS      OPERATIONAL LEVEL OF WAR LOUISIANA MANEUVERS      TRAINING STRATEGIES			15. NUMBER OF PAGES 59	
			16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT UNCLASSIFIED	18. SECURITY CLASSIFICATION OF THIS PAGE UNCLASSIFIED	19. SECURITY CLASSIFICATION OF ABSTRACT UNCLASSIFIED	20. LIMITATION OF ABSTRACT UNLIMITED	

# The 1994 Louisiana Maneuvers: Is Back to The Future What Our Army Needs?

A Monograph  
by  
Major William R. Moyer  
Armor



School of Advanced Military Studies  
United States Army Command and General Staff College  
Fort Leavenworth, Kansas

Second Term AY 91-92

Approved for Public Release; Distribution is Unlimited

**SCHOOL OF ADVANCED MILITARY STUDIES  
MONOGRAPH APPROVAL**


Major William R. Moyer

Title of Monograph: The 1994 Louisiana Maneuvers: Is Back to the Future  
What Our Army Needs?


Approved by:

  
LTC Douglas L. Tystad, MA

Monograph Director

  
COL James R. McDonough, MS

Director, School of  
Advanced Military  
Studies

  
Philip J. Brookes, Ph.D.

Director, Graduate  
Degree Program

Accepted this 28<sup>th</sup> day of May 1992

DTIC QUALITY INSPECTED 2

<b>Accession For</b>	
NTIS GRA&I	<input checked="" type="checkbox"/>
DTIC TAB	<input type="checkbox"/>
Unannounced	<input type="checkbox"/>
Justification	
By	
Distribution/	
Availability Codes	
Dist.	Avail and/or Special
A-1	

## ABSTRACT

**THE 1994 LOUISIANA MANEUVERS: IS BACK TO THE FUTURE  
WHAT OUR ARMY NEEDS?** by Major William R. Moyer, USA, 59 pages.

This monograph examines current U.S. Army tactical and operational training strategies and analyzes the 1994 Louisiana Maneuver initiative to determine if the 1994 operational exercise can link current operational level training to future Combined Arms Training Strategies (CATS). The Army Chief of Staff's 1994 Louisiana Maneuver initiative will be an important peacetime (post-Desert Storm) step towards fixing a host of Army operational level training weaknesses in the face of an uncertain future. In fact, the 1994 Maneuvers will revitalize the operational training strategy by implementing a futuristic, operational campaign simulation, which parallels the 1941 Louisiana Maneuvers organized and executed by Generals Lesley J. McNair and George C. Marshall.

To explore the linkage between Army operational training strategies and the 1994 Louisiana Maneuvers, I first provide an analysis of past and future Louisiana Maneuver concepts. Next, current and emerging Army tactical and operational training strategies are examined, followed by a discussion of the 1994 Maneuver working blueprint being developed by the U.S. Army Training and Doctrine Command. Historical examples, as well as recent Desert Storm experiences highlight the need to conduct the 1994 Maneuvers so that a wide spectrum of operational level problems can be fixed before the next war.

My conclusion is that the 1994 Louisiana Maneuvers are the logical next step in preparing a smaller Army for the challenging strategic missions of the 1990's. Training today has forged an intimidating land force that only needs operational level fine tuning. The 1994 Maneuvers will reach out and gather in senior leaders and staffs to train on the difficult task of synchronizing the warfighting continuum. The 1994 Maneuvers can "seal the gap" between operational level peacetime potential and wartime performance.

## TABLE OF CONTENTS

I.	INTRODUCTION . . . . .	1
II.	HISTORICAL COMPARISONS - LOUISIANA MANEUVERS PAST AND FUTURE . . . . .	7
III.	CURRENT U.S. ARMY TRAINING STRATEGIES . . . . .	19
IV.	FUTURE OPERATIONAL TRAINING STRATEGIES . . . . .	26
V.	1994 LOUISIANA MANEUVERS - CONCEPTS, STRUCTURE AND EVALUATION . . . . .	34
VI.	CONCLUSIONS . . . . .	42
	ENDNOTES . . . . .	45
	BIBLIOGRAPHY . . . . .	50

## I. INTRODUCTION

In the past we have jeopardized our future, penalized our leaders and sacrificed our men by training untrained troops on the battlefield. (1)

General George C. Marshall

America's Army, honed by its experience in Operation Desert Storm, has returned to its traditional peacetime role of preparing for the next conflict. Nevertheless, critics say that the combat power and sheer brute force deployed by the Army during that operation is out of contact with the new strategic realities confronting the nation. The principal challenge faced by the Army's leadership is how it will successfully adapt to a fluid strategic environment, new national military strategies, and evolving national priorities. General Gordon Sullivan, current Army Chief of Staff, believes the key to meeting the challenge of the post-Cold war era is maintaining momentum while accommodating change. The "old world" view of relative certainty, popularly characterized as bipolar, with US forces squarely focused on the Warsaw Pact, has been replaced by a "new world order" of multi-polar threats, a regional theater focus, and strategic land forces tethered to US bases.

The Army's senior leaders must foster a vision that steers the US Army clear of the cycle of interwar readiness failures that are so well understood in the Chief of Staff's expression, "No more Task Force Smiths!" Our senior general officers must determine the future goals and direction for the Army, while focusing on the interests of the nation at large. There are important post-Desert Storm strategic

issues that will impact on the readiness of Army forces and design of future missions:

- What will be the mission for the Army of the future?
- What scenario(s)/contingencies will cause the U.S. to commit the Army?
- Is the level of manpower for the Total Army adequate to achieve the requirements of the missions?
- What is the readiness trade-off of decreasing end strengths?
- What price will the American people be willing to pay for future Army force structure?
- Is there a strategy/capabilities mismatch? If so, what are the risks? How could they be reduced?
- Can the Army mobilize and deploy to project combat power promptly?(2)

All of these are difficult questions that can only be answered by an encompassing strategy, designed to maintain, reshape, resource, strengthen, and train the force.

Future readiness challenges and the Army's corresponding efforts to overcome traditional postwar inertia get to the heart of this monograph. For many reasons, General Sullivan believes training is the key to maintaining the post-Desert Storm readiness edge. Training is the glue that holds the Army together and is the top peacetime priority for all Army leaders. And only through training are soldiers, equipment, and a blend of forces and doctrine all combined as they are in combat. (3)

The American Army has essentially won wars with its "hands", crushing enemy forces with combined arms tactical forces, while marginally trained operational headquarters - the "head" - acted as campaign overseer. Historically, these victories were the result of wartime preparations and training focused on battalion, regiment, and divisional training strategies, usually at the expense of training time and dollars for larger echelons such as corps and armies.



Operational headquarters (armies and army groups) before World War II, existed in skeletal form in peacetime, waiting until war to be used in combat. In most cases, only the first shots of war caused the armies and army groups to mobilize, train, and synchronize their wartime preparations with tactical forces. But, US Army forces can no longer wait for the next war before synchronizing tactical and operational training. Post-Cold War uncertainty requires that our operational headquarters be fully trained for contingency missions without the luxury of time for mobilization. Future training strategies must capsulize successful tactical training with the growing necessity of having readily trained operational headquarters before battle.

Soon after World War II (after the Army culled lessons learned from combat experienced field armies and army groups), the Army recognized a realistic peacetime need to train operational level commanders and staffs. However, operational training has yet to become an integral component of the Army's current overarching training strategy. In fact, the authors of the noted book, America's First Battles, believe senior operational headquarters have traditionally spent valuable training time focusing on peacetime requirements, not critical wartime tasks. The authors also allege that US operational headquarters learn to fight on the battlefield rather than during peacetime training. (4) General Sullivan firmly believes that the US Army must close this gap between operational peacetime potential and wartime performance. (5)

As the Army reduces force structure, its senior leaders must sharpen the Army's operational level training edge despite budget cuts, uncertain threats, and evolving military strategies and doctrine. Faced with that challenge, Army leaders can solve operational training weaknesses by aiming sights on the key issue: how best to develop and synchronize an operational training strategy with already proven tactical training programs and strategies. In effect, the Army can improve strategic readiness for future contingencies by ensuring that all levels of headquarters, including the operational level, are trained and ready.

The Army Chief of Staff has chosen to revitalize the operational training strategy by implementing a futuristic, operational campaign simulation, which he envisions paralleling the 1941 Louisiana Maneuvers. In those exercises, Generals George C. Marshall and Lesley J. McNair prepared World War II units and soldiers for combat. By building a training initiative where none existed, and naming it the 1994 Louisiana Maneuvers, General Sullivan hopes to build the operational level warfighting capability of the Army.

This monograph seeks to determine whether the Army Chief of Staff's 1994 Louisiana Maneuver initiative will be a useful peacetime (post-Desert Storm) step towards fixing a host of current Army operational level training weaknesses in the face of an uncertain future. Many operational exercises are currently carried out each year. The exercises are designed to improve Army operational warfighting potential, but, are the exercises synchronized to current Army training strategies?

To accomplish the task of exploring the linkage between Army operational training strategies and the 1994 Louisiana Maneuvers, an analysis of past and future Louisiana Maneuver concepts will first be presented.

Next, the current U.S. Army operational training system strengths and weaknesses will be identified. Analysis will reveal that current operational headquarters train hard but are not yet included under the umbrella of the Army's emerging tactical Combined Arms Training Strategy (CATS). An examination of Army tactical training strategies will reflect that operational forces can benefit from both a CATS structure, and participation in an operational level Battle Command Training Program (BCTP) similar to division and corps BCTP's.

After analyzing tactical training strategies and emerging operational level training strategies, the 1994 Louisiana Maneuver working blueprint (being developed by US Army Training and Doctrine Command --TRADOC) will be presented and assessed. To evaluate whether the 1994 Louisiana Maneuvers are the best strategy to attack operational training weaknesses, four criteria will be used to evaluate the evidence. First, will formal operational training techniques be established and should they align closely with the work done to develop division and corps training strategies? Second, will the 1994 Maneuvers establish a qualitative edge over existing training systems, and third, are they necessary to improve Army operational headquarters allocated to theater commanders in chief (CINCs)? The last criterion concerns General Sullivan's long term training vision. Should the 1994 Louisiana Maneuvers set precedent and become part of

the Army's combined arms training strategy, acting as a combined arms training center (CTC) for the Department of the Army staff and its operational headquarters? This assessment will answer the criteria and offer implications for operational forces preparing for future war.

This is especially important because of the changing nature of war. COL John D. Waghelstein, a retired Army special forces officer now serving as an instructor at the Naval War College wrote that in future wars:

We must realize the adaptive capacity of our enemies. The near-perfect execution of Desert Storm will not be easily reproduced elsewhere, particularly if the enemy has limited resources and fewer delusions of grandeur. Most likely, the next conflict will require an entirely different mix of political considerations, coalitions, and correlation of forces. If we accept the possibility of a different challenger, we must be prepared to develop a different set of responses that may not involve a massive allocation of firepower and maneuver in the traditional way of war. (6)

The Army's operational headquarters face the same future training challenges as the tactical forces -- readiness in the post-Cold War era. The 1994 Louisiana Maneuvers and a refined operational training strategy may improve operational readiness. This monograph will explore that possibility.

## II. HISTORICAL COMPARISONS - LOUISIANA MANEUVERS PAST AND FUTURE

It is difficult to overemphasize the importance of the field maneuvers....The present maneuvers are the closest peacetime approximation to actual fighting conditions that has ever been undertaken in this country....As an insurance policy against whatever operations our troops might be called upon to perform, the cost of these maneuvers represents a trifling premium to pay. Tremendous sums of money have been spent on our national defense effort, but I know of no single investment which will give this country a greater return in security and in the saving of lives than the present maneuvers. (7)

General George C. Marshall, September 1941

Louisiana Maneuvers '94 is the Army's program to bring together and control the forces of change; to demonstrate that it is the trained and ready force our nation requires....It will draw on the great tradition of large scale maneuvers and will lay the groundwork for a whole new generation of training and readiness concepts. (8)

General Gordon Sullivan, February 1992

### The 1941 Louisiana Maneuvers

If America's Army is now battle tested and conditioned for the 1990's, her pre-World War II Army was lean and undernourished by a nation uninterested in any global role. The US had traditionally avoided the maintenance of a large professional Army, opting instead for isolation, avoidance of allies, financial stringency in government, and relative economic self-sufficiency. Russell Weigley in his book, History of the United States Army, has suggested that the "Army during the 1920's and 1930's may have been less ready to function as a

fighting force than at any time in its history....It lacked even the combat capacity that the Indian campaigns had forced on it during the 19th century...." (9) The small pre-World War II Army of 190,000 (as compared to 12 million by 1945) was designed to secure national borders, provide small bases for wartime expansion, and protect its diplomats and merchants abroad. In essence, US leaders chose to avoid the political and economic costs of maintaining large standing forces and assume the risks of its basic policy: to rely on a large civilian work base and industrial might to provide the resources for military forces mobilized after the nation went to war. (10)

Strategic military planners set out after World War I to formulate a military strategy to cope with national policy. Distilled from policy, budget constraints, and meager force structure were four overarching military missions:

1. Defend Continental US, Hawaii, Alaska, and Panama Canal Zone
2. Defense of Monroe Doctrine
3. Defense of Philippines
4. Protect US interests in China (11)

The size and force structure of the US armed forces were inadequate to achieve these strategic goals. The Army in 1939 totaled only 190,000 men with three half-strength infantry divisions, six skeleton cadre divisions, a couple of horse cavalry divisions, an understrength mechanized brigade, and an air arm wholly inadequate in size and equipment. There were no corps or field headquarters functioning full-time. (12) General George C. Marshall inherited this emaciated force in 1939, succeeding General Malin Craig as new Chief of

Staff of the Army. Marshall's promotion from one to four star general in August 1939 followed on the heels of war in Europe.

The German war machine had rushed into Poland in September 1939 and followed up their success in eastern Europe with a stunning invasion of France in the spring of 1940. The air Battle of Britain late in 1940 and a Nazi thrust deep into the Soviet Union in the summer of 1941 all preceded General Marshall's efforts to field an Army even marginally trained to wartime standards. Marshall felt the Army needed more troops, an intensified training program, much more equipment, and recognition by Congress and the American public of the Army's strategic deficiencies. The President and Congress begrudgingly gave Marshall what he needed prior to Pearl Harbor and then "carte blanche" after US entry into World War II. General Marshall selected General Lesley McNair as his strategic trainer. McNair organized and managed an auspicious mobilization program that ultimately prepared 27 divisions, nine corps, three armies, and nine air groups to participate in the 1941 Louisiana Maneuvers. (13)

Building an Army that would fight overseas carried with it new training requirements. The Army would have to be qualitatively and quantitatively better than any US Army that had previously mobilized for war. German mechanization and battle doctrine would put US forces in jeopardy if American leadership failed to modernize before US and German forces tangled in battle overseas. The US had to train for a modern, mechanized war in overseas theaters, against a German threat that had undergone mechanized transition in the 1930's. Training would

close the gap between German and American forces, but only with time and the stewardship of General Lesley McNair. (14)

McNair understood his role as the Army Ground Forces (AGF) trainer: give senior tactical commanders the training facilities and equipment they needed and allow subordinates the freedom to accomplish the essential warfighting skills. Divisions and corps needed work on troop control, air-ground coordination, learning the roles of armor and anti-armor, movement and maneuver of large forces, and learning how to sustain their forces. In addition, Marshall and McNair used the maneuvers as a laboratory to test emerging combined arms doctrine and force structure, the use of airborne troops, and the continued utility of horse cavalry.

Planning for the Louisiana Maneuvers had started as early as December 1939 when McNair began the difficult task of outlining a training strategy that met with General Marshall's pragmatic approach to teaching soldiers the science of fighting. Dr. Christopher Gabel, noted scholar and author of The U.S. Army GHQ Maneuvers of 1941, outlines the training strategy as conceived by General McNair and Lt. Col (later General) Mark Clark:

A General Headquarters (GHQ) directive to the four field army commanders [was issued in January 1941] outlining corps and army training for the year. It called for one to two months of corps-level training to begin after the completion of divisional combined training. Corps training was to culminate in corps-versus-corps or corps-versus-division maneuvers before 30 June 1941. After corps training, and a similar period of field army training, two enormous army-versus-army maneuvers would take place under GHQ direction. (15)



The first and only army-versus-army maneuver in US history took place over 30,000 square miles in north central Louisiana from 15 to 28 September 1941. Two untried US field armies lumbered through two weeks of "fighting" in the fall of 1941, while three seasoned German army groups continued to slice their way through the heartland of the Soviet Union. Marshall and McNair knew they had an army to train quickly since "it was the stuff that would win or lose wars." (16)

Jean R. Moenk, an analyst with the Historical Branch of the former U.S. Continental Command, published an extensive monograph on US large scale maneuvers in 1969, outlining the four major reasons and (interpreted objectives) for conducting the Louisiana Maneuvers:

1. Training high-level staffs and support elements by requiring a realistic exercise of time and space factors - corps/division command and control.
2. Generating tactical and logistical situations requiring decisions and actions - Decision-making staff process.
3. Providing a framework for joint coordination - Air/ground warfighting.
4. Introducing the unexpected - Dealing with friction/fog of war. (17)

The exercise objectives sparked to life as LTC Mark Clark used a grease pencil to sketch the opening scenario on a Louisiana roadmap shortly before phase I (week one) of the Louisiana Maneuvers. The scenario was designed to force the smaller (130,000-man, but armor-heavy) Red Second Army of Lieutenant General (LTG) Ben Lear to attack and destroy the numerically superior (270,000-man) Blue Third Army of LTG Walter Krueger. Meanwhile, Generals Marshall and McNair kept close watch of the war in Europe as the German Army changed the face of warfare by integrating tanks and dive bombers in a blend of speed, flexibility, unpredictability, and momentum. (18) The Louisiana scenarios were

designed to use the only two US armored divisions and the Army Air Corps to assess the impact of mechanization and German Blitzkrieg doctrine on the battlefield, and to develop US countermeasures to German armored warfare. In fact, General McNair gathered his exercise umpires together the night before the armies clashed to stress the importance of analyzing the offensive role of armor and defensive anti-tank tactics so important to modern warfare. (19) As it turned out, armor's role had little impact on the maneuvers, as unit leaders at all command levels worried more about command and control, leadership, training the infantryman, and breaking away from peacetime training complacency.

During the first week, LTG Lear's smaller Red Army was badly mauled by the overpowering Blue Army. Red Army armor thrusts failed to penetrate deep behind Blue Army lines as Lear had planned. Red Army momentum stalled while Blue Army truck-mobile infantry collapsed on exposed Red flanks, prematurely ending the phase one army-versus-army movement to contact. The purpose of the second phase of the Louisiana maneuvers was to discover whether a small Red force could, through imaginative defensive planning and action, hold out against a Blue Army that had been made superior in every respect except air power. Red Army defensive efforts in week two proved too much for the superior Blue Army, as LTG Krueger's forces flagged at rain swollen rivers, obstacles, blown bridges, and a tenacious delaying action by the 2nd Cavalry Division. General McNair declared a "cease-fire" after phase two and the

maneuvers ended on a note of caution: tactical training at all levels was far from the sine qua non standards needed for war overseas.

Dr. Christopher Gabel's excellent account of the 1941 Louisiana Maneuvers lucidly describes the waning exercise months of 1941. He captures well the spectrum of planning, preparation, and execution of the 1941 Maneuvers and offers the following scholarly conclusions about the effectiveness and worth of the Maneuvers:

- \* As unit training, the maneuvers did not do the wartime Army much good.
- \* The maneuvers did bridge a critical gap between theoretical training and practical application of military skills.
- \* Staffs that had never seen a unit larger than a regiment found themselves moving corps and field armies - this newfound ability to move units came into play immediately with the declaration of war.
- \* Army logisticians transported and supplied some 400,000 soldiers during the maneuvers. (McNair believed this effort one of the best of the maneuvers.)
- \* **It is unlikely that Marshall or McNair viewed the maneuvers as a device to train the senior commanders in operational art. (emphasis added)**
- \* It is plausible that the maneuvers made a contribution to the Army's and the nation's psychological preparation for war.
- \* The Army's senior leaders must have been enormously reassured to see that the newly mobilized Army, fabricated from scratch after two decades of skeletonization, actually functioned capably in the field. (20)

The 1941 Maneuvers were a critical component in America's war effort. The Maneuvers ended in September 1941 and the Japanese bombed Pearl Harbor two months later. America entered World War II with an Army that had begun the process of forging doctrine, organization, and training into a strategic force. Thus, the 1941 Louisiana Maneuvers "provided the medium in which an embryonic Army completed an important formative process, setting the stage for its metamorphosis into an Army that could fight and win." (21)

### **The 1994 Louisiana Maneuvers**

Today, senior leaders must guide the Army through a "minefield" of constraints similar to those General Marshall trod before WW II. The Army is now a base force tailored specifically for competing global demands. General Carl Vuono, former Army Chief of Staff, accurately describes the Army's current strategic mission as one of "projection of power from the US to trouble spots around the globe...concentrating forces within the US and projecting power swiftly and massively, to advance and defend our vital interests whenever they're challenged." (22)

New missions carried out by a smaller army means back-to-basics at every level, especially in training how to project power as part of a joint contingency operation. Despite recent joint and combined experiences during Desert Storm, the spectrum of Army strategic and operational missions remains complex (see Figure 1 on the next page). Operational warfighting has become a synchronization challenge as the phases of projecting forces from peace to war blur. The strategic preparation and conduct of war as shown in Figure 1 will continue to be the training focus for the foreseeable future. That focus is the essence of the 1994 Louisiana Maneuvers. The Maneuvers will be designed to better prepare the Army staff and operational forces (theater army, field army, or Army Service Component headquarters) to synchronize mobilization, deployment, and employment of tactical forces globally.

**PREPARATION PHASE (COMUS BASE)**

**DEPLOYMENT PHASE (COMMUNICATIONS ZONE)**

**FORCE STRUCTURE**

**PREPARATION PHASE (COMUS BASE)**

PRE MODERNIZATION - MODERNIZATION

PHYSICAL PLANT TRAINING BASE

SUPPORT BASE

MODERNIZATION BASE

TECHNOLOGICAL BASE

MANAGING/EXPANSION BASE

COMMODIFICATION BASE

TRANSPORTATION BASE

COALITION BASE

TOTAL ARMY UNITS

STRUCTURE

STATION

COMMAND

MAN

EQUIP

REPLENISH

MODERNIZE

TEACH DOCTRINE

TRAIN

FORM

FOR

ORIGIN

HLB

ORIGIN

HLB

FORSCOM

MODERNIZATION READINESS (MNR)

OPERATIONAL READINESS (OR)

**DEPLOYMENT PHASE (COMMUNICATIONS ZONE)**

STRATEGIC LIFT

UNLOAD

RECEIVE

MANUP

UNITS

STOCKS

REPLACE

AGENTS

UNLOAD

HLB

ORIGIN

HLB

FORSCOM

MODERNIZATION READINESS (MNR)

OPERATIONAL READINESS (OR)

**FORCE STRUCTURE**

AIRLAND BATTLE DOCTRINE & CONCEPTS

CONFLICT SPECTRUM

EMPLOY

INTELLIGENCE

STRATEGY

OBJECTIVES

WAR PLANS

CONTROL

SUSTAINMENT

TEARDOWN

THREAT

STRATEGIC NUCLEAR WAR

TAA

OBJ AREA

WARFIRE MISSION CAPABILITY READINESS (WMC)

**FUNCTIONAL PANELS**

**LEGEND:**

ALD - AVAILABLE TO LOAD DATE

CP - CENTRAL POWER

DR - DELIVERY RATE

SAC - CHIEF OF STAFF CORPS

SAD - EARLIEST ARRIVAL DATE

NS - HOME STATION

LAO - LATEST ARRIVAL DATE

AM - AMBUSHING AREA

MS - MODERNIZATION STATION

MMIC - MILITARY TRAFFIC MANAGEMENT COMMAND

PDE - PORT OF DEPARTURE

POD - PORT OF DEBARKATION

POM - PREPARATION FOR OVERSEA MOVEMENT

FOR - PREPARATION FOR REPLACEMENTS FOR OVERSEA MOVEMENT

DOB - REQUIRED DELIVERY DATE

HLB - REQUIRED LOAD DATE

SR - SUSTAINMENT DATE

TAA - TOTAL ARMY ANALYSIS

The spectrum of strategic missions above incorporates joint and US Army doctrine, US Code - Title 10 responsibilities (24), recent combat experience, and Cold War lessons learned. Changing strategic missions have changed the Army's outlook on operational art. Operational art has become the fulcrum with which the Joint Chiefs of Staff (JCS) and theater CINCs must manipulate a lever of US-based land power to exert greater global force. The tactical fight is the basic component of the Army fight. The theater and operational commanders and staffs must mobilize, move, lift, and sustain large forces over great distances at the end of vulnerable strategic tethers. TRADOC Pam 525-5, Airland Operations, emphasizes the expanding importance of operational dexterity:

The requirement for the Army to project combat power is a complex task which extends beyond mere deployment. It requires joint assets and training, a balanced force mix, and organizational flexibility. The Army must be prepared to conduct forcible entry and fight immediately to protect lodgements, allowing for deployment of additional required capabilities.... It is clear that in the arena of contingency planning and execution, the Army must improve knowledge, training, and develop doctrine. (25)

The Army's recent performance during Desert Storm highlighted the effectiveness of the tactical forces, while operational forces struggled with the multi-role functions of power projection. Third US Army's experience in Desert Storm is offered as an example of an operational headquarters' dexterity in executing the multi-role functions of projecting combat power, conducting a ground campaign, and sustaining the force logistically. Third Army was reactivated in 1982 as a planning and exercise headquarters for US Central Command (USCENTCOM). Early in August 1990, Third Army deployed to Saudi Arabia and, based on METT-T, took on three functions: USCENTCOM's Army Component Command (ACC), the theater army in southwest Asia, and as a numbered field army. LTG Yeosock designed his command to accomplish the dual missions of coordinating command and control of incoming combat forces and serving as the Army's theater logistical base of operations. As the Army component of USCENTCOM, Third Army was responsible to USCENTCOM for the following tasks: 1.) the planning and employment of all ground forces, 2.) providing the theater reserve, 3.) operating the theater Communications Zone (COMMZ), 4.) conducting joint and combined land forces coordination, and

finally, 5.) providing theater civil affairs, psychological operations, and prisoner of war operations. (26)

Third Army's force structure inhibited peacetime assimilation of so many tasks simultaneously, but a transfusion of trained personnel and equipment during Desert Shield gave Third Army the necessary warfighting vigor. Therein lies the problem. The Army requires an EAC headquarters that can plan for operations in peacetime, command and control land forces in conflict, and rapidly transition from peace to crisis. The EAC echelon carries a heavy load of responsibility as it transitions in the 1990's to new missions centered on power projection, crisis response, and global access. Operations Desert Shield/Storm demonstrated the possible requirement for future Army EAC headquarters to prepare the theater and serve:

- \* As a Joint Task Force (JTF), able to command and control joint forces and communicate with establishing CINC or National Command Authority.
- \* As a Joint Force Land Component Command (JFLCC), capable of commanding and controlling assigned land forces and coordinating land operations with other commanders (air, sea, or special forces).
- \* As the Army (Theater, Field, or Numbered) headquarters for multi-corps operations. (27)

General Sullivan has decided to bolster peacetime operational readiness by rekindling the spirit of the 1941 Louisiana Maneuvers, and using the concept as a vehicle to strengthen operational staffs, correct operational level training weaknesses and establish an Army level BCTP. The Chief of Staff's concept is appealing and reasonably malleable: he believes the Army should build an operational level exercise as a "campaign in the true sense of the word --

extended operational context, linked operational objectives, strategic intent, and branches and sequels. The Louisiana Process would focus on regional contingencies through the full operational range....including the full vertical and horizontal range of departmental and warfighting functions but with specific emphasis on organizational design, active and reserve roles and functions, and requirements determination." (28)

The Maneuvers would encompass the full range of strategic missions through a process of campaign simulation, warfighting seminars, "war councils", and joint participation with existing JCS exercises. The scope and importance of the 1994 maneuvers will equal those of 1941, but operational commanders and staffs will train to a higher theater strategic and operational standard while tactical forces continue important battle-focused training. The 1994 maneuver objectives provide the proper perspective to the exercise:

1. Energize and focus the intellectual process of reshaping the Total Army.
2. Synchronize the process of change [from forward deployed to a focus on power projection].
3. Practice Title 10 responsibilities; be the BCTP for the Army.
4. Develop and explore policy options for Title 10 warfighting activities.
5. Provide a vehicle for senior commanders to make timely decisions to evolve the force; develop strategic alacrity within the institution. (29)

In the period just before WW II, Army leaders recognized their own weaknesses in theater operations and conducted large scale stateside maneuvers to correct those deficiencies. "We now find ourselves in a similar situation today, but cannot expect to conduct training on the same scale [as the 1941 Louisiana Maneuvers]. We must provide a realistic capability to train comman-



ders and staffs in the conceptual requirements for decision making at the operational level. Where are these operational-level decision-making laboratories?" (30) General Sullivan wrote those words five years ago. Now he is a key trainer of Army operational forces. He can sharpen the Army's operational training edge with an aggressive operational training strategy and the 1994 Louisiana Maneuvers.

### III. CURRENT U.S. ARMY TRAINING STRATEGIES

War is a phenomenon of details that must go right....a violent social and technical phenomenon in which the details often mean everything and humans are supposed to get the details right....getting it right demands superlative command and control top to bottom, theater wide. It also takes practice, so that troops enter combat as veterans. Fighting forces need tools through which they can learn from the experiences of war without going to war. (31)

LTG John H. Cushman, USA, ret.

Training effectiveness in peacetime can be measured by successes on the battlefield. The Army's 100 hours of combined arms mayhem during Desert Storm reflect the traditional US historical relationship between realistic training and combat prowess. (32) Generals Marshall and McNair learned fifty years ago that pre-World War II training efforts did not adequately prepare US forces for war. The 1st Armored Division, veteran of the 1941 Louisiana Maneuvers, received its baptism of fire in North Africa in 1943, losing 100 tanks and hundreds of men killed, wounded, and missing in its early days of fighting. US

Army battle failures since WW II have led today's senior leaders to adopt training strategies that give our fighting units their "first battles" before combat. Future "first battles" must link changing Army missions with the tactical and operational forces earmarked for contingency operations. The Army's future is at hand; training must be the point of the spear, wherever it may be directed.

Good strategies are carefully crafted to meet some desired end state. In this case, the Army's training end state published in Field Manual (FM) 25-100, Training the Force, is robust and concise: "The Army must be trained and ready in peacetime to deter war, to fight and control wars that do start, and to terminate wars on terms favorable to US and allied interests." (33) The United States Army Posture Statement - FY 93 describes terms favorable to US interests as decisive victory, resulting from a combination of quality soldiers, competent leaders, modern equipment, quality force mix, effective doctrine, and challenging training. Challenging training is in turn focused on the realism of the CTCs and BCTP and oriented toward joint operations and contingency missions. (34)

With a well-defined end state, the Army has invested considerable effort to visualize the "how to" of executing its training strategy: updating doctrine via FM 100-5, providing tactical "how to fight" manuals from corps to squad, publishing training concepts in FM 25-100 and FM 25-101, and, finally, developing an overarching Combined Arms Training Strategy (CATS). In addition, Army and TRADOC long range training plans provide further focus to training strategies that envision a future linked to embedded technology, seamless

simulation, and virtual reality simulation. For example, a division at Fort Hood, TX, will be able to satellite link their BCTP Warfighter Command Post Exercise (WFX) to an organic brigade maneuvering against the Opposing Force at the National Training Center at Fort Irwin, CA. The Army is on the verge of a virtual training technology explosion. The Louisiana Maneuvers of 1994 can begin capturing and harnessing the power of training technology to strengthen operational warfighting.

However, there is currently no formal US Army operational training strategy. That does not imply that our senior leaders train without a strategy. Each echelon above corps (EAC) commander (35) is charged with training his staff just as corps and division commanders are. But corps and divisions fall under the training umbrella of CATS, an emerging training strategy that provides structure and refinement to the 'how-to' of today's force training doctrine. (36) General Sullivan believes commanders at all levels can use CATS to develop a training strategy tailored to their specific needs based on their Mission Essential Task List (METL, the most important wartime missions requiring training). (37)

CATS, in essence, is a training management strategy that identifies critical gates or standards that soldiers or units must achieve before proceeding to a more complex training event. FM 25-100 directs senior leaders to link their training strategies to executable training plans by "designing training events related to wartime mission scenarios, focusing the force on several key METL tasks, and integrating all of the battlefield operating systems into combined arms

and joint exercises. Major training events are the common building blocks that support an integrated [training strategy]." (38) In addition, Army Regulation (AR) 350-28, Training-Army Exercises, urges corps and EAC commanders to use command field exercises (CFXs), command post exercises (CPXs), and participation in large scale JCS exercises to practice strategic deployment techniques and joint and combined warfighting operations. (39)

CATS identifies to division and corps commanders and staffs what events, frequencies, and resources are required to train to a standard. The CATS provides commanders with a descriptive menu for training. The CATS range from battalion to corps and include three sub-strategies: maneuver, gunnery, and soldier skills. Ideally, CATS assists the unit commander in determining the optimum balance between maneuver, live fire, and training aids. Training resources such as fuel, repair parts, ammunition, live fire ranges, and tactical maneuver areas are included in a CATS package.

Operational headquarters, however, have not been brought under the CATS umbrella. Without an EAC training strategy, operational headquarters operate outside established Army training standards and events CATS provides to corps and divisions. As shown earlier in Figure 1, EAC missions are becoming more complex. There should be an EAC training strategy that blueprints missions, METL, and a training strategy linking EACs with subordinate tactical units already using CATS.

General John Galvin, Supreme Allied Commander Europe, believes our "state of training - our capability to project power with forces available - is a visible marker of the viability of our deterrence posture....At the higher levels [EAC], simulation allows us to train our leaders in the command and control of large units. If we do it right we can give our colonels and generals the experience they will need in mastering the operational art at EAC." (40) Currently, division and corps commanders and staffs get that training, albeit tactical level operations, through rigorous BCTP WFX's that challenge senior staffs in tactical decision-making. BCTP is a critical gate (test) each corps and division must pass. Operational headquarters are currently exempt from the Army's CTC/BCTP system. That is surprising in light of the difficulty of synchronizing the functional operating systems designed for operational warfighters. (41) Those EAC combat tasks are just as important to battlefield success as division and corps tasks. The visual image of EAC combat responsibilities is strikingly similar to the operating systems of tactical units. In light of the similarities, EAC headquarters should be incorporated under CATS so training strategies are standardized throughout the Army .

The Third US Army recently executed the operational warfighting job in combat, as LTG John Yeosock outlines in a post-Desert Storm journal article entitled "Army Operations in the Gulf Theater." His report outlines missions, organization for combat, and a METT-T (mission, enemy, time, terrain, and troops available) analysis of the ground campaign. LTG Yeosock admits in his

conclusion to the article that "establishment of EAC organizations was a complex process involving the overwhelming support of the Army and major commands....An important Desert Storm lesson is the need to train commanders and staffs on Army functions and gain proficiency to perform them quickly." (42)

In addition to LTG Yeosock's views, personal interviews with officers who were temporarily assigned to Third Army HQ reveal a current need to bring EAC units quickly under CATS as well as the need for an annual Louisiana Maneuvers program. Comments highlighted weaknesses with staff planning, synchronizing the campaign plan, planning branches and sequels, and the ability to operate as a field army, theater army, and Army service component simultaneously. Several weaknesses from Third Army staff are similar to staff skill problems that divisions and corps commonly experience during BCTP WFX exercises. Operational headquarters, in fact, face many of the same training challenges and weaknesses as tactical headquarters.

Operational training realities as well as LTG Yeosock's comments and those of Third Army staff officers address a major assumption of this paper: mastery of the operational operating systems is critical in modern warfare. The sheer complexity and scope of combat at this level requires a strategy and program that General Sullivan believes gets at "the conceptual problems associated with the integrated employment of large-scale air and land forces towards a campaign objective." (42)

In a 1987 article, the Army Chief of Staff emphasized the importance of the operational operating systems and listed the most important tasks facing EAC commanders and staffs during operational ground campaign execution:

1. orchestrate tactical actions from an operational perspective
2. prepare branches and sequels to the main effort of the campaign plan
3. conduct long-term, extended-range intelligence collection operations
4. confront enemy operational art and defeat it
5. orchestrate operational maneuver
6. create operational reserves and employ them to gain decisive objectives
7. properly mass operational fires
8. make operational level decisions to keep the campaign at a high tempo
9. anticipate time and place of culmination for friendly and enemy forces (44)

The ground campaign plan and the inherent synchronization of joint assets will severely test the abilities of any operational commander and his staff in the next war, just as they did in Desert Storm. As part of the strategic warfighting mosaic, Army operational headquarters and senior leaders can work to strengthen Desert Storm weaknesses by linking future training strategies to the proposed concepts of the 1994 Louisiana Maneuvers.

The 1994 Maneuvers can serve as the operational level component of an overall training management system that is one of the Army's strongest suits. The Army must close the training strategy gap that links the tactical training systems to operational training. The Army must include EAC under the CATS umbrella and provide EAC commanders and staffs with a set of gates that "seals the gap between peacetime potential and wartime performance." Slowly but surely, CATS will pull together all the warfighting echelons of the Army.

#### IV. FUTURE OPERATIONAL TRAINING STRATEGIES

**Blinding Flash of the Obvious: Operational commanders and staffs will not make a miraculous transition to brilliance during imminent hostilities...**

**Anonymous observation by a BCTP  
Observer who served as a staff officer during  
Third US Army preparation for Desert Shield.**

Principles in FM 25-100 remain valid; however, operational training strategies must evolve to meet changing requirements and new challenges. Post-Desert Storm introspection by Army senior leaders should couple current operational-level capabilities to an end state that fulfills the Army's strategic contract. Tactical CATS has modified division and corps training strategies. Expanding CATS to include the operational-level of war could provide answers to important questions affecting future forces: how should Army training strategies evolve, and what should an operational training strategy look like? Examination of the changing nature of the strategic environment, roles, and missions of our Army should identify optimum training strategies for future operational forces.

TRADOC Pam 525-5, Airland Operations, accurately depicts the Army's shifting focus to meet changing strategic conditions under which Army forces will have to train for future fights:

1. The focus will be on an ability to project power from the US.
2. Greater emphasis on contingency operations...several regions/no-notice.
3. Joint training exercises will be essential.



4. Develop flexibility: more interoperability with joint/combined forces.
5. Ability to quickly package forces: active, reserve, light, heavy, SOF.
6. Increased focus on operations short-of-war and post-conflict actions.
7. More staff training focused on short planning times.
8. Ability to synchronize dispersed forces as they maneuver in battle.
9. Increased use of BCTP and simulations to develop operational skills.
10. Special emphasis on more mobile, agile support to combat forces.
11. Find additional ways to integrate separate brigades (artillery, air defense, engineers, military intelligence) into large-scale exercises.
12. Better linkage to Reserve Components (RC).
13. Increased use of CTCs, simulators, and simulation exercises. (45)

An operational corollary in TRADOC Pam 525-5 urges operational forces to increase joint and combined simulation-supported exercises for staffs responsible for operational command, and increase simulations that exercise command and control of contingency operations. (46)

The outline for an operational training strategy incorporates war-plans, doctrine (joint and Army), exercises, theater CINC specific missions, and other external directives; i.e., US Code-Title 10 responsibilities the Army Chief of Staff is directed by law to execute. As stated earlier, phases of execution and the myriad of tasks can blur at the operational level. Operational forces can be called on to be three armies at once: a numbered field army, a theater army, or an Army component command (ACC) to support joint and combined functions within a theater of operations or war. Doctrine may call for a certain role, but ultimately the CINC chooses what tasks and roles his ACC will perform. Competing demands on the roles and functions of an operational force create tension and complicate the structure and design of training strategies.

As stated in chapter two, Army EACs must conduct preparations for regional crisis response and power projection operations in peacetime that exceed the capabilities of the Army corps. Normal peacetime roles include preparing theater operation plans, coordinating and executing training exercises in theater, supporting and sustaining forces in theater, and acting as the CINC's ACC. There is a Department of the Army proposal to maintain Army service components within each unified command for regional planning, but use Third Army as a deployable EAC headquarters (HQ) assigned to a gaining CINC in the event of a regional crisis requiring command and control above corps level. The plan has great potential. The Army would have an experienced and cohesive EAC HQ that could rapidly deploy in response to crisis - a valuable part of any operational training strategy.

Aside from force design and clearly defined EAC roles, the operational training set-piece should have a battle focus to guide exercises, education, and doctrinal development. The new National Military Strategy gives the Army just such a battle focus: respond to regional crisis quickly and effectively by projecting land-based power through a combination of forced entry assets, mobile armored combat forces, and decisive force designed to completely overpower any opponent. (47) The task is then one of directing and executing joint contingency operations around the world. Strategically, contingency operations mounted from the US require backward planning; that is, planning begins with termination of the operation and redeployment, works backward through the campaign to

operations subsequent to entry of US forces, and finally to forced entry and staging. The Army must realize that strategic forced entry is the most difficult of all joint military operations and requires close coordination, execution, and repetitive joint training. (48)

Clearly, any future operational training strategy should have as its battle focus the strategic land mission of projecting a tailored force package of forced entry and reinforcing forces. JCS Joint Pub 1 points out that "the capability provided by land power [the Army] can often be a key capability of the joint campaign...enabling land power to be projected and directed against a foe." (49) That ability to project power can be fundamental to achieving the joint campaign's objectives. A force projection army changes the fundamental way Army leaders must build forces, develop METL, define warfighting tasks, and sort out synchronization of the fight along the operational continuum depicted in Figure 2 on the next page. Transitioning from a forward deployed army to a force projection army increases the importance of mobilization and deployment, while slowing response times and complicating strategic air and sea lift efforts. Future operational training strategies will have to incorporate great changes in the way the Army has structured its crisis action and power projection capabilities.

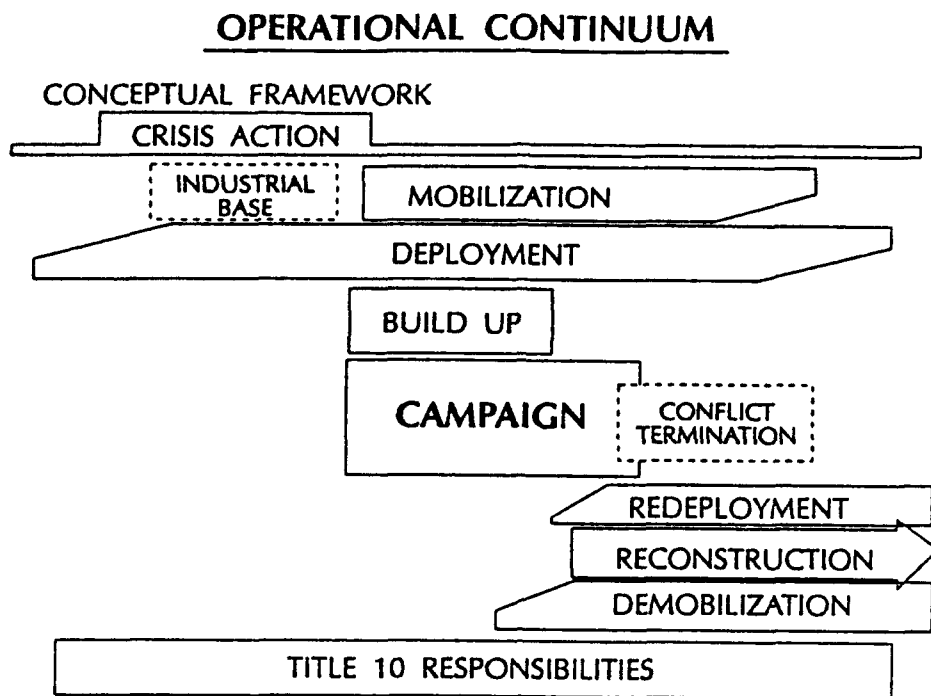


Figure 2 (50)

LTG Yeosock, Third US Army commander, believes the major problem facing the Army today is this change of focus from a forward deployed army to a power projection army. (51) His concern is captured graphically in Figure 3 which outlines the fundamental differences between a forward deployed and a force projection army. Interestingly enough, Brigadier General Wass de Czege, founder of the US Army School of Advanced Military Studies, foresaw LTG Yeosock's opinion, commenting eight years ago on the implications of the changing battlefield conditions as depicted in Figure 3:

What all of this implies is that commanders and staffs at all levels must know more and must discharge their combat functions much more rapidly over wider areas with greater consequences of failure by several orders of magnitude than their World War II counterparts. (52)

# FORCE PROJECTION ARMY

## DIFFERENCES BETWEEN A FORWARD DEPLOYED ARMY AND A FORCE PROJECTION ARMY

FORWARD DEPLOYED ARMY	VS	FORCE PROJECTION ARMY
<ul style="list-style-type: none"> <li>• THREAT ORIENTED ARMY</li> <li>• COALITION - SET</li> <li>• ESTABLISHED INFRASTRUCTURE</li> <li>• RESOLVE/DETERRENCE FORCES PRESENT</li> <li>• ESTABLISHED C2</li> <li>• BUILD END STATE ARMY (e.g. TAA PROCESS, ALLOCATION RULES/ WORKLOAD FACTORS)</li> <li>• CHARACTERIZED BY TREATIES, MOUS, STANAG, STATUS OF FORCES, ETC</li> <li>• FORCE GENERATION - LOWER RISK EARLY</li> <li>• OVER ONE HALF OF ARMY STATIONED OVERSEAS</li> </ul>		<ul style="list-style-type: none"> <li>• CAPABILITIES BASED ARMY</li> <li>• COALITION - NOT SET</li> <li>• POTENTIAL FOR ZERO INFRASTRUCTURE W/O ARMY INFRASTRUCTURE</li> <li>• RESOLVE/DETERRENCE FORCES MUST BE PROJECTED</li> <li>• EVOLVING C2</li> <li>• BUILD ARMY FROM A POOL OF CAPABILITIES APPLIED TO METT-T</li> <li>• MAY HAVE NO A PRIORI AGREEMENTS</li> <li>• FORCE GENERATION - HIGHER RISK EARLY</li> <li>• OVER ONE HALF OF ARMY STATIONED STATESIDE</li> </ul>

Figure 3 (53)

A tailored EAC with a battle focus is only part of any potential operational training strategy. Theater wartime doctrine, which is good and getting better, provides "Army senior leaders an operational-level perspective to link theater strategy to tactics through the use of operational art." (54) FM 100-5, Operations, is being rewritten and the proposed draft chapters on theater structure, control, and wartime operations represent an improvement over what is currently published. In addition, FM 100-7 (DRAFT), The Army in Theater Operations,

is an excellent companion to FM 100-5 and clarifies the various roles and responsibilities of senior operational commanders in a theater. Doctrine, then, forms part of any future EAC CATS.

Brigadier General L.D. Holder has published several articles in the last few years concerning the lack of a coherent operational training strategy. He believes the question of "how to fight" applies at the operational level of war just as it does at the tactical level. The Army must expend great effort and accelerate its current training at the operational level of war. BG Holder envisions a multifaceted strategy combining education, collective and individual staff training, and periodic high-level staff exercises designed to improve joint staff skills and expertise in conducting campaigns. (55) His views are neither surprising nor unconventional. His argument verges on simplicity. EAC training must look like, taste like, and be like what we demand from our corps and divisions. Staff training can be a combat multiplier. Our operational forces must continue to train in peace at the same high standard that carried them successfully through Desert Shield/Storm. The complex tasks and skills necessary to put operational art to canvas are perishable skills. A standardized and rigorous training strategy for EAC would go a long way towards a better prepared contingency EAC HQ.

What then should the Army's operational training strategy look like? Doctrine, structure, and battle focus provide a foundation with which to build a training strategy. Tactical forces operate effectively within the CATS framework as should EAC forces. Operational training should be incorporated into current

and future CATS. The following ideas are offered as potential improvements to proposed CATS for operational headquarters: 1.) future training strategies should be standardized, at least in methods of evaluation, 2.) EAC HQs should be evaluated at regular intervals just as divisions and corps HQs are during BCTP WFXs -- in fact, EACs could benefit a great deal from BCTP exercises, or "piggyback" off of corps WFXs, and finally, 3.) EAC training must continue to fit within JCS and CINC-directed exercises and training requirements.

Future Department of Army training regulations and publications should include robust discussions of events, frequencies, resources, how to fight, and mission training tasks, conditions, and standards. An EAC Mission Training Plan (MTP) should be the logical next step in the development of EAC training strategies. Biennial BCTP WFXs coupled to annual participation in the Louisiana Maneuvers would be a useful step towards increased training. EAC training strategies should be tailored to meet the unique needs of an operational staff, but take on the proven structure of tactical training CATS.

## V. 1994 LOUISIANA MANEUVERS - CONCEPTS, STRUCTURE, AND EVALUATION

The art of war is best learned in combat through the course of several campaigns....But, in a time when war may be very short, when so much depends on the initial performance of our leaders and when so much depends on proper planning and preparation to ensure the success of units during the initial days of the next conflict, there must be great emphasis on developing sound military judgement in peacetime. (56)

BG Wass de Czege

Military history refracts the light of its lessons in many ways. Historical lessons can bend in oblique patterns, diffuse in prismatic order, or reflect in mirror images of understanding. The 1994 Louisiana Maneuvers are an important subset of initiatives by senior Army leaders to forestall the reflected images of past wartime disasters by an Army failing to prepare for the next war (i.e., Kaserine Pass, Task Force Smith, Desert One). In each case, US forces entered combat situations unprepared and untrained. In the case of the 1st Armored Division at Sidi-Bou-Zid, the division's battle failure reflected the lack of Army training and modernization prior to the 1941 Louisiana Maneuvers.

Pre-Desert Storm training strategies, although unsynchronized at the tactical and operational-levels, were a key factor in preparation for that war, and, will play an even greater role through the end of the decade. General Sullivan's Louisiana Maneuver initiative is designed to stitch together tactical and operational training strategies in an exercise designed to validate doctrine, refine operational concepts, develop senior leaders, practice joint and combined operations, and train the Army.

### **1994 LAM Concepts**

Large-scale maneuvers have been a part of the US Army training strategy since the 1941 Louisiana Maneuvers proved their worth in preparing the Army for World War II. Cold-War resolve, until the collapse of the Warsaw Pact, usually created extensive Euro-centric maneuvers designed to test the Army's



strategic capability to repel a Soviet invasion of West Germany. These maneuvers literally swallowed up tremendous amounts of men, material, and space. The last of the "late-great" large-scale maneuver exercises was the 1988 Return of Forces to Germany (REFORGER), which pitted two full-strength Army corps of over 100,000 troops in pseudo-operational maneuvers over an area the size of Montana. REFORGER 1988 was the last multi-million dollar US Army exercise where troops and combat vehicles served as operational and strategic training aids.

Today, large scale training exercises as outlined in the Army's posture statement to Congress, take place "in a wide variety of settings and exercise possible contingencies as an essential requirement of [the Army's] overall strategy....One of the primary objectives of the Army exercise program is to train commanders, staffs, and units in a wartime operating environment to execute assigned operation plans, and apply contemporary doctrine, tactics, and procedures....A comprehensive exercise program is a vital part of the requirement to remain trained and ready and will continue to be vital in the future." (57)

Army forces still deploy world wide to participate in large-scale exercises, but computer simulation has all but eliminated the need for tactical forces to participate in operational-level JCS/CINC directed theater exercises. Over 80 JCS/CINC directed and coordinated exercises will take place in fiscal year 1992. The vast majority are operational exercises crafted to train joint and combined operational forces and staffs in planning and warfighting. The 1994 Louisiana

Maneuvers will in many ways replicate JCS/CINC exercises, and in other ways focus on Army (projection of land forces in a contingency operation) specific operational training.

The concept for the maneuvers has its roots in our tactical training programs and strategies. Exercises provide structure for battle focus. General Sullivan envisions the Louisiana Maneuvers as an "operational and strategic decision-making laboratory", similar to tactical force CTCs and BCTP, where operational forces could train to the same tough standard as tactical forces. His concept takes the operational level of war to a new standard:

I expect the Louisiana Maneuvers will evolve as a living process and, much like a military campaign, will take a course not predictable by us at this point. We must be prepared to evolve it as appropriate. We must craft an architecture to try out new ideas, assess them, and use the information in a timely way. We must not allow our expectations to grow without bounds and we must resist the temptation to do too much. From the senior leader perspective, I expect to keep issues at an operational-strategic level - whether they be Title 10 or warfighting issues; although others may imbed objectives at other levels in any particular exercise. The challenge will be to keep our eye on what are really the major issues. At the end of 1994, I do not expect to have found "truth with a capital T," but I do expect to have substantially redefined the method by which the Army transforms itself, to have developed and institutionalized a degree of strategic alacrity in our major decision making processes that will enable the Army, as an institution, to adapt more quickly to the changing environment. (58)

General Sullivan's concept takes on added historical significance when leavened with General George C. Marshall's principal remarks made on the eve of the 1941 Louisiana Maneuvers:

The training of this modern Army has been steadily progressive in nature.

The maneuvers constitute a field laboratory to accept or discard new methods of applying fundamental tactical principles....By actual field operations we are determining the proper tactics for the employment of armored units....The results of [the maneuvers] at times have been startling. In some cases divisions would have been annihilated; in others they would have been captured. On the field of battle such events would be tragic. Today they are merely mistakes....As an insurance policy against whatever operations our troops might be called upon to perform, the cost of these maneuvers represents a trifling premium to pay. (59)

In General Marshall's case, he could hardly afford to spend time seriously training operational formations. His maneuvers had to chisel out tactical building blocks with which to build combat divisions. In contrast, General Sullivan can focus squarely on operational level maneuvers, knowing the Army maneuver CTCs and BCTP are preparing our tactical muscle for the next fight. Both Army Chiefs of Staff envision(ed) the maneuvers as a vehicle of change -- exercises designed to significantly improve strategic land forces for war.

### **1994 LAM Structure**

Currently, TRADOC is the executive agent for developing concepts, substance, and direction to the maneuvers. The program will start small, gather momentum, and provide a BCTP for operational forces as well as the Army staff. The maneuver will consist of campaign computer wargaming simulation, warfighting seminars, and regional exercises linked by distributed computer simulations, all woven into critical crisis response scenarios with tough operational warfighting tasks. The maneuvers will in fact be separate exercises linked in time by objectives and scenario. (Figure 4)

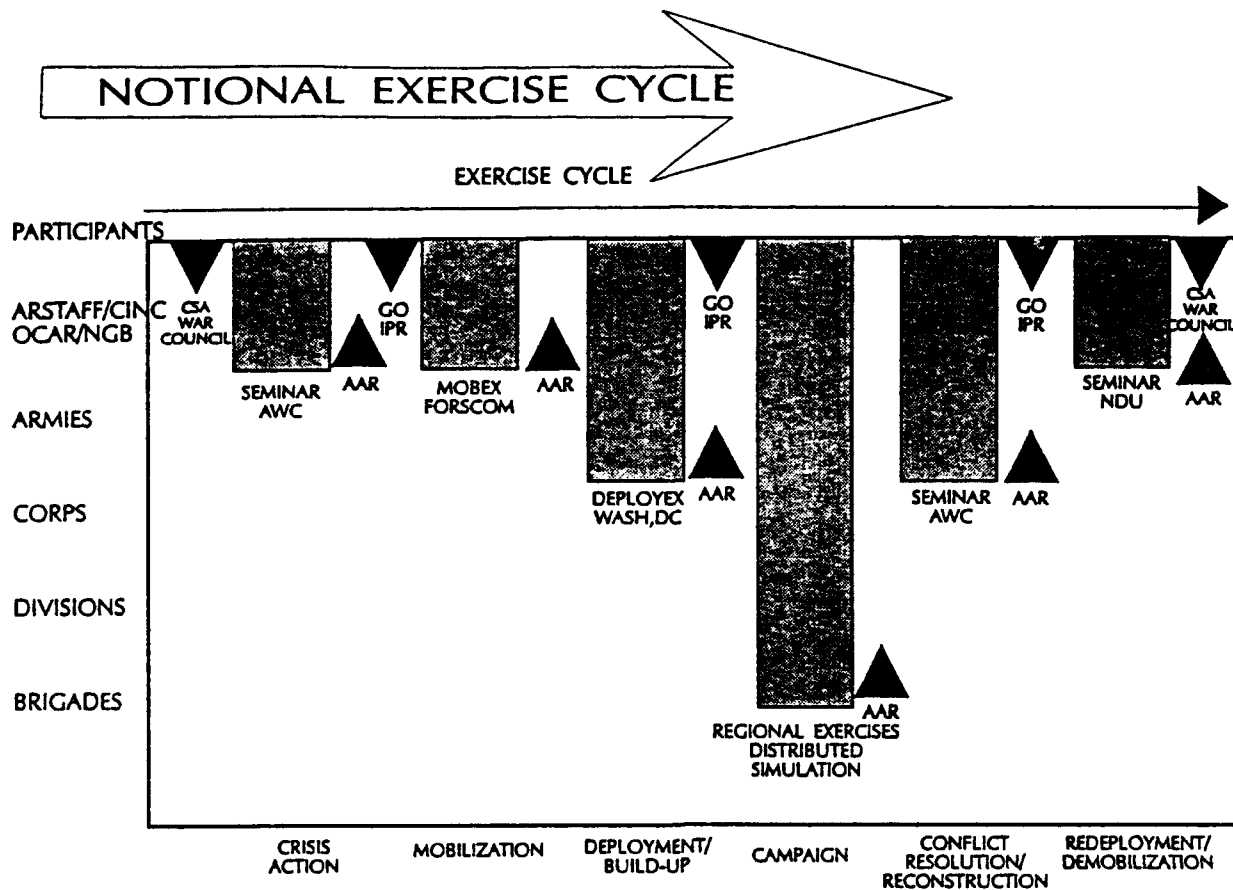


Figure 4 (60)

The Maneuvers will initially team up with JCS/CINCPAC exercises. The scenario in 1994 will focus initially on a dual-contingency, two-theater scenario (major and minor contingencies -- i.e., a regional war and a major disaster relief effort, or "1 1/2 wars") centered on a Korean crisis, using an established JCS exercise, ULCHI FOCUS LENS, as the framework for training. TRADOC planners expect to again use the Korean, ULCHI FOCUS LENS scenario in 1995,

escalating the crisis to two major theaters, projecting contingency forces to Korea and reinforcing US units to Europe or Southwest Asia.

The Louisiana maneuvers will be a Total Army effort, and span the entire operational continuum as depicted earlier on page 15. Ideally, the family of simulations and communications networks used will allow distributed command and control so that major warfighting units can fight from their own headquarters. There will be a host of related events (games within games) embedded within the warfighting scenario. These games within games could include assessments of new strategic lift capabilities, simultaneous humanitarian and disaster relief efforts, and analyses of how new equipment entering the Army inventory would affect future operations; i.e., a light tank or the Comanche helicopter. (61)

Planning leadership will come from a Chief of Staff designated Louisiana Maneuver Task Force. The task force will mold concepts into proposed structure and produce a program in the next 24 months. Sometime before the first exercise, the task force will transition to a general officer War Council. This War Council will then act as a steering committee to establish scenarios, decide on task and policy options, and publish annual action plans to guide follow-on exercises. The War Council's efforts are designed to "sandwich" the Maneuvers, in effect providing guidance before the exercise and analyzing lessons learned after the exercise for integration into future exercises.

The 1994 Maneuvers will link the strategic and operational levels of war with regional tactical exercises, while also establishing an operational band of

excellence to develop a standard for future theater-level training programs. The training concepts and structure will be much more complex than can be described in this paper. The process will be many things to many Army leaders, but it will generate horizontal and vertical synchronization training challenges for our Army's senior operational warriors.

### **1994 LAM Evaluation**

By design, the maneuvers will be structured as a training tool for the Chief of Staff to ensure the Army can execute its evolving strategic missions to standard. Perhaps the task force can learn from operational training programs being carried out in Germany by NATO. NATO has been operating an operational warfighting simulation center for five years now. The training facility, known as the Warrior Preparation Center, is specifically designed to train NATO joint and combined operational-level commanders and staffs. A working model using distributed simulations is in place and highly successful. The Louisiana Maneuvers can combine the best from the center's program, along with emerging concepts being developed by TRADOC planners responsible for the 1994 Maneuvers.

The Army should look to the Maneuvers to validate new concepts and evaluate new doctrine, organizational designs, and theater training strategies. Formal operational training strategies and techniques will be established by

TRADOC in the next few years. TRADOC planners are intent on linking the 1994 Maneuvers to future training strategies and CATS.

The focus must be on critical operational wartime tasks: force projection, forced entry, command and control of theater forces, and the synchronization of operational combat power. The battle focus should remain projecting strategic land-combat power over long distances for prolonged periods of time. With this focus, the Maneuvers can establish a qualitative edge over existing operational training strategies. The 1994 Maneuvers will allow Army senior leaders to use JCS/CINC exercises, i.e., ULCHI FOCUS LENS, a regional exercise designed to train one set of players, and expand it to train Army leadership and address specific Army operational concerns. This addition to the 1994 Louisiana Maneuvers will improve future operational readiness by stressing the importance of formal operational training events just as CTCs and BCTP help divisions and corps. The formal addition of operational headquarters under CATS can only improve the quality of Army operational forces allocated to theater CINCs.

To admit there are still many operational training weaknesses is an admission of the real need for the 1994 Louisiana Maneuvers. The history of Army operational training was shown to be poor. The Army has made a large commitment to tactical training and can expand on that success by improving operational training strategies. The Maneuvers can put our operational forces well within the all-important band of excellence, fill a void between JCS exercises and Army tactical training, and play a major role in fixing a host of current Army

operational level training weaknesses. The Army Chief of Staff has made the decision to move forward with this initiative. Just as General Marshall's 1941 Maneuvers set precedent, so should the 1994 Maneuvers set precedent to cap an Army training strategy with a common thread of training logic running from platoon to Army level. The 1994 Louisiana Maneuvers must become the capstone of the Army's combined arms strategy and become the BCTP for the Department of the Army staff and Army operational headquarters.

## VI. CONCLUSIONS

Future wars will be more lethal and fast paced than ever before. To win a short war, we cannot learn to be operationally sound during battle. With our current emphasis on military history and the operational art, we are becoming accomplished battle artists. Our problem is that while we know how to "paint" a battlefield, we do not know how to pick the right landscape, construct the canvas or mix the paint. We need operational scientists with hard operational skills. We cannot create them overnight. We should start training them now.(62)

Lieutenant Colonel Richard P. Geier, US Army

The purpose of this study has been twofold: first, to examine current US Army tactical and operational training strategies, and second, analyze the 1994 Louisiana Maneuver initiative to determine if the operational exercise can link operational training to future CATS. Our path of analysis has led us to consensus on a number of issues: Army CATS must include operational strategies, those



strategies must be standardized and evaluated, and the 1994 Louisiana Maneuvers are a useful vehicle to train operational forces in a BCTP environment. The maneuvers are the logical next step in preparing a smaller Army for the challenging strategic missions of the 1990's.

We began the study by looking at historical comparisons between the conditions that led to the 1941 Louisiana Maneuvers and those present today. Senior Army leaders in 1939-41 faced war and the daunting task of training an army from scratch. General Marshall would be envious of the post-Desert Storm army. Training today has forged an intimidating land force that now only needs operational fine tuning. Evidently, the post-Gulf War American ethos of proscribing the need for a large professional army is similar to the pre-war America of the 1930's and 1940's. However, as historian Edward Coffman reminds us, "it is unlikely that the Army will ever return to the periphery of American life where it was located throughout the peacetime periods prior to World War II..." (63) There are certainly more differences than similarities in the conditions preceding the 1941 and 1994 Louisiana Maneuvers.

Examinations of operational training strategies and their relationships to the need for standardization and formal evaluation, have led us to the conclusion that the Louisiana Maneuvers can fix a wide spectrum of operational problems. CATS provides our large divisional and corps organizations a formal, performance-oriented training strategy. CTCs and BCTP act as catalysts for the high standard of training carried out by our tactical combat battalions, divisions, and

corps. A BCTP at Army level would place operational forces into a hierarchy of training excellence. The 1994 Louisiana Maneuvers would also support Army commitments to JCS/CINC training requirements and give the Army Chief of Staff an exercise with which to train his staff on Title 10 tasks. In addition, General Sullivan's decision-making laboratory could test a host of force design and developmental issues.

Qualitatively, the Maneuvers could reach out and gather in senior leaders and staffs to train on the difficult task of synchronizing the operational continuum. The maneuvers should establish standards and evaluative processes and set long-term precedent. Tactical performances must be linked to strategic missions. The 1994 Louisiana Maneuvers can "seal the gap" between peacetime potential and wartime performance.

## ENDNOTES

1. Robert A. Fitton, editor, Leadership - Quotations from the Military Tradition, (Boulder, CO: Westview Press, 1990), p. 285.
2. U.S. Army War College, Army Command and Management - Theory and Practice, (Carlisle Barracks, PA: Department of Command, Leadership, and Management, 1991-92), p. 26-3.
3. General Gordon R. Sullivan, "A Trained and Ready Army: The Way Ahead," Military Review, November 1991, p. 3.
4. Charles E. Heller and William A. Stofft, America's First Battles - 1776-1965, (Lawrence, Kansas: University Press of Kansas, 1986), p. 331.
5. General Gordon R. Sullivan, "Learning to Decide at the Operational Level of War," Military Review, October 1987, p. 17.
6. Colonel John D. Waghelstein, "Some Thoughts on Operation Desert Storm and Future Wars," Military Review, February 1992, pp. 82-3.
7. Larry I. Bland, editor, The Papers of George C. Marshall- Volume II, (Baltimore, MD: The Johns Hopkins University Press, 1986), p. 607.
8. General Gordon R. Sullivan, "Statement of General Gordon R. Sullivan, Chief of Staff, United States Army - Comments for Testimony to Congress," February 1992.
9. Russell F. Weigley, History of the United States Army, (New York: Macmillan Publishing Co., Inc., 1967), pp. 402-3.
10. Allan R. Millett and Williamson Murray, editors, Military Effectiveness - Volume III, World War II, (London: Unwin Hyman Ltd., 1988), pp. 45, 47.
11. Allan R. Millett and Williamson Murray, editors, Military Effectiveness - Volume II, The Interwar Period, (London: Unwin Hyman Ltd., 1988), p. 78.
12. Christopher R. Gabel, The U.S. Army GHQ Maneuvers of 1941, (Washington, D.C.: Center of Military History, United States Army, 1991), p. 8.
13. Ibid., p. 44.

14. Charles E. Kirkpatrick, "Lesley J. McNair - Training Philosophy for a New Army," Army History, Winter 1990-1991, p. 12.
15. Gabel, p. 44.
16. Thaddeus Holt, "Relax - It's Only A Maneuver," Military History Quarterly, Winter 1992, p. 30.
17. Jean R. Moenk, A History of Large-Scale Maneuvers In The United States, 1935 - 1964, (Fort Monroe, VA: HQ, United States Continental Army Command, 1969), pp. 4-5.
18. Richard M. Ketchum, "Warming up on the sidelines for World War II," Smithsonian, September 1991, p. 96.
19. General Lesley J. McNair, "GHQ Director Comments, Second versus Third Army Maneuvers, 1941.", 22 September 1941, pp. 1-7.
20. Gabel, pp. 170-196.
21. Christopher R. Gabel, "The 1941 Maneuvers - What Did They Really Accomplish?," Army History, April 1990, pp. 5-7.
22. General Carl E. Vuono, "National Strategy and the Army of the 1990's," Parameters, Summer 1991, p. 5.
23. U.S. Army War College, p. 9-4.
24. The United States Legal Code, Title 10, Armed Forces, pp. 3-14, sections 3013, 3032, and 3033 outline the general duties respectively of the Secretary of the Army, Army Staff, and the Chief of Staff of the Army. Specifically, Congress mandates the Secretary of the Army under Section 3013(b) to conduct all affairs of the Department of the Army to include recruiting, organizing, supplying, equipping, training, servicing, mobilizing, demobilizing, administering, maintaining, and necessary construction of structures pertinent to Army interests.
25. TRADOC Pam 525-5, Airland Operations, (Fort Monroe, VA: U.S. Army Training and Doctrine Command, 1991), p. 28.
26. Lieutenant General John J. Yeosock, "Army Operations in the Gulf Theater," Military Review, September 1991, p. 3.

27. Briefing slides from Department of the Army, Deputy Chief of Staff for Operations, concerning the changing roles of Echelons Above Corps force design, roles, and missions.

28. General Gordon R. Sullivan, "1994 Louisiana Maneuvers Concept and Intent," received from COL Keitzman, Combined Arms Command, Trng Div, Ft. Leavenworth, March 1992.

29. Ibid., no page numbers.

30. Sullivan, "Learning to Decide," p. 19.

31. John H. Cushman, "Command and Control of Theater Forces: Issues in Mideast Coalition Command," Cambridge, MA, February 1991, pp. 44-5.

32. FM 25-100, Training the Force, (Washington, D.C: Headquarters, Department of the Army, November 1988), p. 1-1.

33. Ibid., p. i.

34. The Honorable Michael P.W. Stone and General Gordon R. Sullivan, Strategic Force-Strategic Vision For the 1990's and Beyond, A Statement on the Posture of The United States Army Fiscal Year 1993, (Washington, D.C: Headquarters, United States Army, 1992), pp. 15-16.

35. Each theater CINC is assigned an Army Component Command to control Army forces apportioned to the CINC for peacetime and wartime missions.

36. Lieutenant Colonel Thomas R. Rozman, "Making the Combined Arms Training Strategy Work," Military Review, May 1991, p. 76.

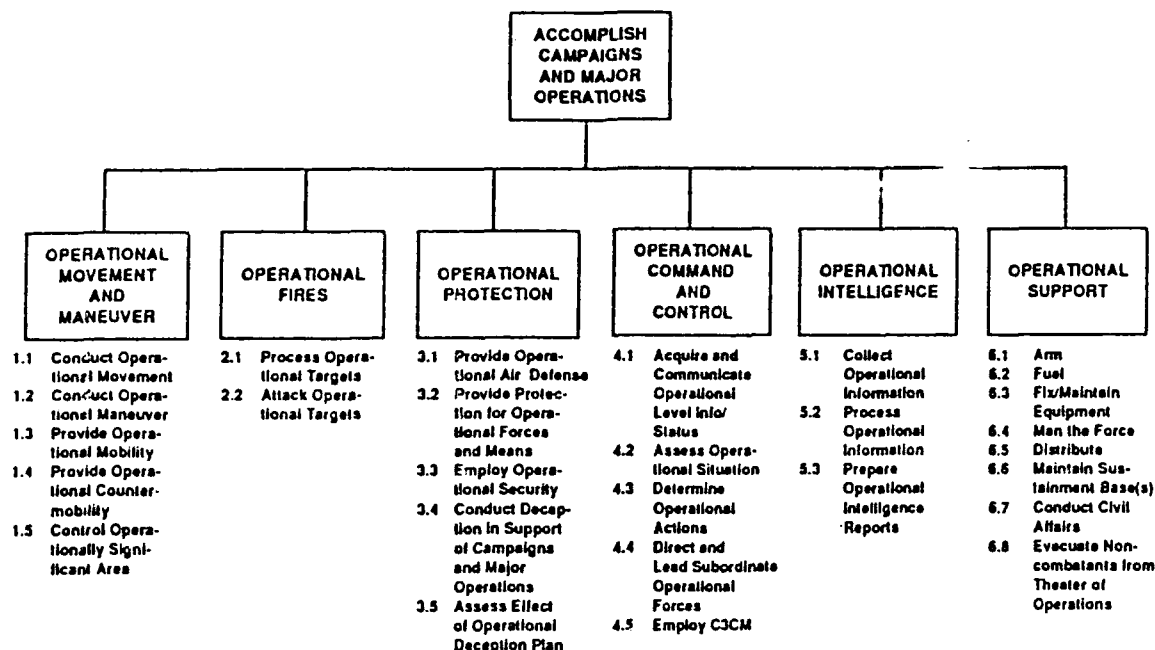
37. Sullivan, "A Trained and Ready Army," p. 6.

38. FM 25-100, p. 3-9.

39. Army Regulation 350-28, Army Exercises, (Washington, D.C: Headquarters, Department of the Army, 1991), p. 5.

40. General John Galvin, "NATO's Training More Important Than Ever," Jane's Defence Weekly, 23 September 1989, p. 567.

41. TRADOC PAM 11-9, Blueprint of the Battlefield, (Ft. Monroe, VA: Headquarters, U.S. Army Training and Doctrine Command, 1990), p. 52.



42. Lieutenant General John J. Yeosock, "Army Operations in the Gulf Theater," Military Review, September 1991, pp. 4-15.

43. Sullivan, "Learning to Decide," p. 17.

44. Ibid., p. 18.

45. TRADOC Pam 525-5, pp. 40-4.

46. Ibid., p. 44.

47. U.S. Army Posture Statement, pp. 23-4.

48. Colonel Robert B. Killebrew, "Force Projection in Short Wars," Military Review, March 1991, pp. 32-3.

49. JOINT PUB 1, Joint Warfare of the US Armed Forces, (Washington, D.C: Joint Chiefs of Staff, 1991), p. 54.

50. Combined Arms Command briefing slide on the Operational Continuum.55. Third U.S. Army briefing slide on Force Projection versus Forward Deployed Army.

51. U.S. Army Command and General Staff College, Concepts and Doctrine Directorate, EAC Command and Control Whitepaper - A Proposal for an EAC HQ for Operations and Sustainment, (Fort Leavenworth, KS: Combined Arms Command, 1992), author notes on personal interview with LTG Yeosock.

52. Colonel Huba Wass de Czege, "Challenge for Future: Educating Field Grade Battle Leaders and Staff Officers," Military Review, June 1984, p.7

53. Third US Army briefing slide on Force Projection versus Forward Deployed Army.

54. FM 100-7 (DRAFT), The Army in Theater Operations, (Fort Monroe, VA: Headquarters, U.S. Army Training and Doctrine Command, 1990)

55. Colonel L.D. Holder, "Educating and Training for Theater Warfare," Military Review, September 1990, pp. 85-98.

56. Wass de Czege, p. 14.

57. U.S. Army Posture Statement, p. 30.

58. Sullivan, "1994 LAM Concept," p. 3.

59. Bland, Papers of George C. Marshall, pp. 607-8.

60. Combined Arms Command briefing slide used to brief General Gordon Sullivan on 23 March 1992 during a decision briefing, 1992.

61. Combined Arms Command 1994 LAM briefing slide, 1992.

62. Lieutenant Colonel Richard P. Geier, "Training Operational Experts for War," Military Review, January 1992, p. 81.

63. Edward M. Coffman, "The American Army in Peacetime," Military Review, March 1992, p. 49.66. Coffman, p. 59.

## BIBLIOGRAPHY

### Books

- Allen, Thomas B. War Games. New York: The Berkeley Publishing Group, 1987.
- Bland, Larry I. editor. The Papers of George Catlett Marshall. Baltimore, MD: The John Hopkins University Press, 1986.
- Blumenson, Martin. Mark Clark. New York: Congdon & Weed, Inc., 1984.
- Blumenson, Martin. The Patton Papers - 1940-1945. Boston: Houghton Mifflin Co., 1957.
- Clausewitz, Carl von. On War. Edited and translated by Michael Howard and Peter Paret, Princeton, NJ: Princeton University Press, 1984.
- Collins, General J. Lawton. Lightning Joe. Baton Rouge, LA: Louisiana State University Press, 1979.
- Dupuy, Colonel T. N. A Genius For War. Englewood Cliffs, NJ: Prentice-Hall, Inc., 1977.
- Eisenhower, Dwight D. At Ease: Stories I Tell to Friends. Garden City, NY: Doubleday & Company, Inc., 1967.
- Fitton, Bober A. Leadership - Quotations from the Military Tradition. San Francisco: Westview Press, 1990.
- Gabel, Christopher R. The U.S. Army GHQ Maneuvers of 1941. Washington, D.C: Center of Military History, U.S. Army, 1991.
- Griffith, Robert K. Jr. Men Wanted for the U.S. Army. London: Greenwood Press, 1982.
- Heller, Charles E. and William A. Stofft. America's First Battles - 1776-1965. Lawrence, KS: University Press of Kansas, 1986.
- Kahn, Chief Warrant Officer E. J. Jr. McNair - Educator of an Army. Washington, D.C: The Infantry Journal, 1945.



- Ketchum, Richard M. The Borrowed Years, 1938-1941. New York: Random House, 1989.
- Kirkpatrick, Charles E. An Unknown Future and a Doubtful Present - Writing the Victory Plan of 1941. Washington, D.C: Center of Military History, U.S. Army, 1990.
- Kreidberg, Marvin A. and Merton G. Henry. History of Military Mobilization in the United States Army - 1775-1945. Washington, D.C: Department of the Army, 1955.
- Millet, Allan R. and Williamson Murray. Military Effectiveness - Volume II, The Interwar Years. London: Unwin Hyman, 1988.
- Millet, Allan R. and Williamson Murray. Military Effectiveness - Volume III, World War II. London: Unwin Hyman, 1988.
- Moenk, Jean R. A History of Large-Scale Army Maneuvers in the United States, 1935 to 1964. Fort Monroe, VA: United States Continental Army Command, 1969.
- Perla, Peter P. The Art of Wargaming. Annapolis, MD: Naval Institute Press, 1990.
- Pogue, Forrest C. George C. Marshall: Education of a General. New York: Viking Press, 1963.
- Pogue, Forrest C. George C. Marshall: Ordeal and Hope. New York: Viking Press, 1965.
- Pogue, Forrest C. Statesman. New York: Viking Press, 1987.
- Puryear, Edgar F. Jr. 19 Stars - A Study in Military Character and Leadership. Orange, VA: Green Publishers, 1971.
- U.S. Army War College. Army Command and Management - Theory and Practice. Carlisle Barracks, PA: Department of Command, Leadership, and Management, 1991.
- Watson, Mark Skinner. Chief of Staff: Prewar Plans and Preparations - United States Army in World War II. Washington, D.C: Historical Division, Department of the Army, 1950.

Weigley, Russell F. History of the United States Army. New York: Macmillan Publishing Co., Inc., 1967.

Student Monographs and Theses

Barnhill, Anthony L. "Train as you Will Fight: Factors Affecting Development of a Strategy to Train National Guard Units to the Level Organized." MMAS, 1990.

Brown, John S. "Winning Teams: Mobilization-Related Correlates of Success in American World War II Infantry Divisions." MMAS, 1985

Donnelly, Edward P. "The Role of the National Training Center During Full Mobilization." MMAS, 1991.

Frazar, Joe N. "How Many Operational Commanders? -- Insights From History." USAWC Military Studies Program Paper, 1986.

Heapy, Dennis G. "NATO Mobilization and Reinforcement: Can We Get There from Here?" SAMS Monograph, 1990.

Kelly, James P. "Theater Strategy Training for Senior Leaders." Air War College Research Report, 1987.

Lowrey, Willis H. "Computer War Gaming and the Army Staff." USAWC Student Thesis, 1969.

Murray, George E. P. "The Louisiana Maneuvers, September 1941: Practice For War." Masters Thesis - Kansas State University, 1972.

Quirk, Richard J. "The Artist's Approach to Military Decision-Making at the Operational Level." SAMS Monograph, 1986.

Rosenwald, Robert A. "Operational Art and the Wargame: Play Now or pay Later." SAMS Monograph, 1990.

Schillare, Quentin W. "Force Generation in an Immature Contingency Theater." SAMS Monograph, 1990.

Spickelmier, Roger K. "Training of the American Soldier During World War I and World War II." MMAS, 1987.

Thompson, Michael R. "Do We Practice What We Preach? Recent Exercises and Operational Art." SAMS Monograph, 1990.

### Journal Articles

Atkeson, Major General (ret.) Edward B. "The Operational Level of War." Military Review, March 1987, pp. 28-36.

Bartlett, Henry C. and G. Paul Holman. "Force Planning for Post-Cold War World: What Can We Learn From Geopolitics?" Strategic Review, Winter 1991, pp. 26-36.

Cannon, Major Michael. "Task Force Smith: A Study in (Un)Preparedness and (Ir)Responsibility." Military Review, February 1988, pp. 63-73.

Cerami, Major Joseph R. "Training - The 1941 Louisiana Maneuvers." Military Review, October 1987, pp. 34-43.

Coffman, Edward M. "The American Army in Peacetime." Military Review, March 1992, pp. 49-59.

Cranston, John. "1940 Louisiana Maneuvers Lead to Birth of the Armored Force." Armor, May-June 1990, pp. 30-32.

Crist, General (ret.) George B. "A U.S. Military Strategy For A Changing World." Strategic Review, Winter 1990, pp. 16-24.

Etzold, Thomas H. "The Strategic Environment of the Twenty-First Century: Alternative Futures for Strategic Planners." Strategic Review, Spring 1990, pp. 23-31.

Gabel, Christopher R. "The 1941 Maneuvers." Military Review, August 1991, pp. 88-89.

Gabel, Christopher R. "The 1941 Maneuvers, What Did They Really Accomplish." Army History, April 1990, pp. 5-7.

Galvin, General John R. "Army Leaders and Military History." Army History, Fall 1989, pp. 1-2.

Galvin, General John R. "ACE 89, A work-out for NATO's Commanders." International Defense Review, October 1989, pp. 1323-1324.

Galvin, General John R. "NATO's Training More Important Than Ever." Jane's Defence Weekly, 23 September 1989, pp. 567-569.

Galvin, General John R. "Warrior Preparation Center: USAF/Army Hammer Out Close Cooperation." Armed Forces Journal, August 1984, pp. 101-104.

Geier, Lieutenant Colonel Richard P. "Training Operational Experts for War." Military Review, January 1992, pp. 73-81.

Grow, Major General (ret.) Robert W. "The Ten Lean Years, From the Mechanized Force (1930) To the Armored Force (1940), Parts 1,2,3,4." Armor, January-August, 1987.

Heiberg, Colonel (ret.) H.H.D. "Organize a Mechanized Force." Armor, September-October 1976, pp. 8-11, 48-51.

Heredia, Major Michael D. "Preparing for WAR - Peacetime Campaign Planning." Military Review, August 1989, pp. 50-63.

Holder, Colonel L. D. "Educating and Training for Theater Warfare." Military Review, September 1990, pp. 85-99.

Holder Colonel L. D. "Training For The Operational Level." Parameters, Spring 1986, pp. 7-13.

Holt, Thaddeus. "Relax - It's Only a Maneuver." Military History Quarterly, Winter 1992, pp. 30-41.

Jacobs, Captain Jeffrey A. "A Mobilization Force." Military Review, November 1990, pp. 3-10.

Ketchum, Richard M. "Warming up on the sidelines for World War II." Smithsonian, September 1991, pp. 89-103.

Killebrew, Colonel Robert B. "Force Projection in Short Wars." Military Review, March 1991, pp. 28-37.

- Kirkpatrick, Charles E. "Lesley J. McNair, Training Philosophy for a New Army." Army History, Winter 1990/1991, pp. 11-17.
- Kitfield, James. "A Game of War." Government Executive, November 1991, pp. 30-33.
- Macdonald, Roddy. "W.W. III, Simulating the Operational Level of War." Journal of Defense & Diplomacy, May 1988, pp. 25-28.
- McMichael, SSgt. William H. "One Year Later: Yeosock Looks Back." Soldiers, August 1991, pp. 28-29.
- Meehan, John F. III "The Operational Trilogy." Parameters, Autumn 1986, pp. 9-18.
- Morgan, Lieutenant Colonel Thomas D. "Battle Command Training: Putting History in War Games." Army History, Fall 1989, pp. 5-7.
- Morgan, Lieutenant Colonel (ret.) Thomas D. "BCTP, Preparing for War." Military Review, November 1989, pp. 2-10.
- Morgan, Lieutenant Colonel Thomas D. "BCTP, Training Leaders." Military Review, July 1990, pp. 42-52.
- Owens, Colonel Mackubin T. "After the Gulf War: The Marine Corps and the New National Military Strategy." Amphibious Warfare Review, Summer 1991, pp. 64-69.
- Owens, Mackubin T. "Force Planning in an Era of Uncertainty." Strategic Review, Spring 1990, pp. 9-22.
- Petersen, John L. "Plan for the 21st Century Now." Proceedings, August 1991, pp. 50-4.
- Robinson, Clarence A. Jr. "Desert Combat Operations." Signal, July 1991, pp. 23-26.
- Rozman, Lieutenant Colonel Thomas R. "All Seeing, All Killing Air Dimension and Army's Force Projection Dilemma." Army, February 1992, pp. 24-27.
- Rozman, Lieutenant Colonel Thomas R. and Lieutenant Colonel Edward E. Blankenhagen. "A Training Concept for Heavy Forces Modernization." Military Review, June 1990, pp. 50-57.

- Rozman, Lieutenant Colonel Thomas R. "Company D (Mobile Combat Range)." Armor, November-December 1991, pp. 23-25.
- Rozman, Lieutenant Colonel Thomas R. "Contingency Operations, Sustainment Training Strategies." Army Trainer, October 1991, p. 33.
- Rozman, Lieutenant Colonel Thomas R. "Expanding the Role of fire and Maneuver Centers." Military Review, January 1991, pp. 29-35.
- Rozman, Lieutenant Colonel Thomas R. "Making the Combined Arms Training Strategy Work." Military Review, May 1991, pp. 74-82.
- Rozman, Lieutenant Colonel Thomas R. "Maneuver and Gunnery Training for Tomorrow." Military Review, November 1991, pp. 67-73.
- Rozman, Lieutenant Colonel Thomas R. "Operational Basing of the Army." Army Logistician, September-October 1991, pp. 33-35.
- Rozman, Lt. Col Thomas R. "Rethinking Readyng The Reserves for War." Army, March 1992, pp. 12-18.
- Rozman, Lieutenant Colonel Thomas R. and Lieutenant Colonel William A. Saunders. "The Expansible Army." Military Review, November 1990, pp. 30-39.
- Saint, General Crosbie E. "A CINC's View of Operational Art." Military Review, September 1990, pp. 65-78.
- Shaud, General John A. "The Way Ahead - Simulators For NATO Training." NATO's Sixteen Nations, July/August 1991, pp. 24-27.
- Spigelmire, Major General Michael F. and Major Henry S. Tuttle. "BCTP and the Victory Division." Military Review, October 1988, pp. 20-26.
- Starry, General Donn A. "To Change an Army." Military Review, March 1983, pp.20-27.
- Stuckey, John D. "Echelons Above Corps." Parameters, December 1983, pp. 39-47.
- Sullivan, General Gordon R. "A Trained and Ready Army: The Way Ahead." Military Review, November 1991, pp. 2-9.

Sullivan, General Gordon R. "Challenge Ahead But Service Says It's 'Up to Task'." The Officer, April 1992, pp. 14-17.

Sullivan, General Gordon R. "Learning to Decide at the Operational Level of War." Military Review, October 1987, pp. 16-23.

Turlington John E. "Truly Learning the Operational Art." Parameters, Spring 1987, pp. 51-64.

Vuono, General Carl E. "National Strategy and the Army." Parameters, Summer 1991, pp. 2-12.

Wass de Czege, Colonel Huba. "Challenge for the Future: Educating Field Grade Battle Leaders and Staff Officers." Military Review, June 1984, pp. 2-13.

Wass de Czege, Colonel Huba. "How to Change an Army." Military Review, November 1984, pp. 32-49.

Waghelstein, Colonel John D. (ret.) "Some Thoughts on Operation Desert Storm and Future Wars." Military Review, February 1992, pp. 80-83.

Yeosock, Lieutenant General John J. "Army Operations in the Gulf Theater." Military Review, September 1991, pp. 2-15.

#### Government Manuals, Reports, Studies

Army Long Range Training Plan 1989-2018. Washington, D.C: Department of the Army, 20 July 1989.

Army Regulation 350-1. Army Training. Washington, D.C: Department of the Army, 11 October 1985.

Army Regulation 350-28. Army Exercises. Washington, D.C: Department of the Army, 12 April 1991.

Army Regulation 350-41. Army Forces Training. Washington D.C: Department of the Army, 26 September 1986.

Bush, President George. National Security Strategy of the United States. The White House, August 1991.

Chairman, Joint Chiefs of Staff, Memorandum of Policy No. 26. Joint Training Program. Washington, D.C: Joint Chiefs of Staff, 6 August 1990.

Cushman, Lieutenant General (ret.) John H. "Command and Control of Theater Forces: Issues in Mideast Coalition Command." Cambridge, MA: Harvard University Center for Information Policy Research, February 1991.

"EAC Command and Control Whitepaper." Fort Leavenworth, KS: US Army Combined Arms Command, Command and General Staff College, Concepts and Doctrine Directorate, 28 January 1992.

Field Circular 100-16-1. Theater Army, Army Group, and Field Army Operations. Fort Leavenworth, KS: US Army Combined Arms Command, 18 December 1984.

Field Manual 25-100. Training the Force. Washington, D.C: Department of the Army, November 1988.

Field Manual 100-5 (Draft). Operations. Fort Leavenworth, KS: US Army Command and General Staff College, School of Advanced Military Studies, Chapters 5, 11.

Field Manual 100-7 (Draft). The Army in Theater Operations. Fort Monroe, VA: US Army Training and Doctrine Command, 31 July 1990.

Field Service Regulations, FM 100-15. Larger Units. Washington, D.C: War Department, 29 June 1942.

GHQ Director Headquarters. "Second versus Third Army Maneuvers - 1941, After Action Report, Camp Polk, LA, 22 September 1941.

Joint Pub 1. Joint Warfare of the US Armed Forces. Washington, D.C: Joint Chiefs of Staff, 11 November 1991.

Joint Chiefs of Staff Pub 3-0 (Test Pub). Doctrine for Unified and Joint Operations. Washington, D.C: Joint Chiefs of Staff, January 1990.

Stewart, Brigadier General (P) John F. "Operation Desert Storm, The Military Intelligence Story: A View from the G-2, 3d U.S. Army." Riyadh, Saudi Arabia, 27 April 1991.



"The National Military Strategy for the 1990's (Draft)." Washington, D.C:  
Department of Defense, 6 January 1992.

The United States Army Posture Statement-FY 93. Strategic Force, Strategic  
Vision For the 1990's and Beyond. Washington, D.C: United States Army,  
1992.

Third Army Maneuvers. "May 5-25, 1940 After Action Report."

Third Army Maneuvers. "Final Report on May 1940 Maneuvers."

TRADOC Long-range Plan - FY 1991-2020, Volume I and II. Fort Monroe,  
VA: US Army Training and Doctrine Command, March 1989, September  
1989.

TRADOC 1994 Louisiana Maneuvers Concept Briefing Slides, used to present a  
decision briefing to General Gordon R. Sullivan in March 1992.

TRADOC Pam 11-9. Blueprint of the Battlefield. Fort Monroe, VA: US Army  
Training and Doctrine Command, 27 April 1990.

TRADOC Pam 350-4. Army Training 2007 (Draft). Fort Monroe, VA: US Army  
Training and Doctrine Command, 25 August 1989.

TRADOC Pam 525-5. Airland Operations. Fort Monroe, VA: US Army Training  
and Doctrine Command, 1 August 1991.